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Subject

Allied Paper, Inc /Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies Monthly Progress Report
Area 1 – Morrow Dam to Plainwell Dam (May 2009)

SEDIMENTS

Dear Jim

Date

June 15, 2009

Attached is the 27th monthly progress report for the Allied Paper, Inc /Portage Creek/Kalamazoo River Superfund Site Supplemental Remedial Investigation/ Feasibility Study (SRI/FS) – Area 1. This progress report is submitted as per Paragraph 37 of the February 2007 Administrative Settlement Agreement and Order on Consent (AOC) for Remedial Investigations/Feasibility Studies (Docket No V-W-07-C-864), as well as Section 7.1 of the associated Statement of Work (SOW). If you have any questions, please do not hesitate to contact me.

Contact

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Sincerely,

ARCADIS

Michael J. Erickson, P.E.
Associate Vice President

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**MONTHLY PROGRESS REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE SRI/FS
AREA 1 (MORROW DAM TO PLAINWELL DAM)**

REPORT #27, MAY 2009

**PREPARED BY ARCADIS
JUNE 15, 2009**

ON BEHALF OF THE KALAMAZOO RIVER STUDY GROUP (KRSG)

SUBMITTED TO

**JAMES SARIC, REMEDIAL PROJECT MANAGER
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA)**

**Monthly Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site TCRA – Former Plainwell Impoundment**

REPORT #27, JUNE 2009

Significant Developments and Activities During the Period

- On May 4, the Kalamazoo River Study Group (KRSG) submitted staff gauge readings to the START contractor for United States Environmental Protection Agency (USEPA)
- On May 5, the Michigan Department of Natural Resources (MDNR) informed the KRSG that all temporary access roads should be removed except the access road leading to the Plainwell Dam and the access road from Miller Road to the former Staging Area 4N
- On May 13, the KRSG, MDNR, Michigan Department of Environmental Quality (MDEQ), Michigan Department of the Attorney General, National Oceanic and Atmospheric Administration (NOAA), United States Fish and Wildlife Service (USFWS), and Stratus performed a site walk to inspect bank restoration in the TCRA work areas. Photographs of this inspection were submitted to the USEPA. The USEPA forwarded these photographs to the KRSG on May 19 and 27 for review and discussion
- On May 15, the KRSG submitted to the USFWS a figure from the TCRA Design Report detailing removal areas restored with restoration stone
- On May 15, the KRSG submitted to USEPA the 26th *Monthly Report for the Allied Paper, Inc /Portage Creek/Kalamazoo River Superfund Site TCRA* for April 2009
- On May 29, the KRSG, USEPA, and MDNR discussed bank restoration modifications and inspections. See the "Issues Encountered and Actions Taken" section for additional information

Data Collected and Field Activities Conducted During the Period

- No field activities were conducted during the weeks of May 1 and May 4
- During the weeks of May 11, 18, and 25, restoration activities were conducted in Removal Areas 12A, 13A, 13B, and near the former Plainwell Dam. Restoration activities included the placement of topsoil and mulch, seeding, installation of an erosion control blanket, and planting of trees and shrubs
- During the week of May 18, the KRSG surveyed existing bank conditions as a part of post-construction bank monitoring
- No data were collected in May

**Monthly Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site TCRA – Former Plainwell Impoundment**

REPORT #27, JUNE 2009

Laboratory Data Received During the Period

- No laboratory data were received during the weeks of May 1, May 4, May 11, or May 25
- During the week of May 18, the KRSG received analytical data for post-construction samples TS10006 through TS10025 (collected in April). Soil samples TS10006 and TS10008 through TS10021 and one duplicate sample (TS10007) were collected from the access road connecting Miller Road to Staging Area 4N. These samples were collected at spacing of 200 feet and from the same locations as pre-construction samples K25753 through K25767 (collected in January 2008). Three post-construction soil samples (TS10022 through TS10024) and one duplicate sample (TS10025) were collected from the Consumers Energy property located near the Plainwell Dam. These samples were collected from the same locations as pre-construction samples K25737, K25738, and K25751 (collected in September and October 2007). All samples were submitted for polychlorinated biphenyl (PCB) analysis and were collected to satisfy the requirements of the license agreement for property access with Consumers Energy. Table A summarizes the samples collected.
- The KRSG is not currently awaiting any analytical data.

Issues Encountered and Actions Taken

- In April, the KRSG inspected the bank restoration areas at the Plainwell TCRA site. On May 13, the KRSG, MDNR, MDEQ, Michigan Department of the Attorney General, NOAA, USFWS, and Stratus performed a site walk to inspect bank restoration areas at the Plainwell TCRA. During the inspection, erosion was identified in parts of Removal Areas 8, 9, and 10. MDNR submitted photographs from the inspection to USEPA, who then submitted the photographs to the KRSG on May 19 and 27. The erosion areas identified were consistent with the areas previously identified by the KRSG during their inspection. The KRSG and USEPA performed a site walk on May 28 to inspect the areas. The KRSG is reviewing the areas and will discuss a plan to address the erosion with USEPA and MDNR at the first annual inspection of the banks in June.

Developments Anticipated During the Next Reporting Period

- Restoration activities scheduled for June include the placement of top soil and mulch and seeding portions of Removal Areas 13A and 13B, and Staging Area 4N. Restoration activities will include the planting of trees and shrubs not completed during 2008. Restoration activities are scheduled to be completed in June.

Mr Michael Ribordy
June 15, 2009

**Monthly Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site TCRA – Former Plainwell Impoundment**

REPORT #27, JUNE 2009

- On June 8, the KRSG is scheduled to host a media event to announce the completion of the Plainwell TCRA
- During the week of June 22, the KRSG, USEPA, MDEQ, and MDNR are scheduled to perform the first annual inspection of the banks at the TCRA site. The KRSG is also scheduled to continue surveying existing bank conditions as a part of post-construction bank monitoring
- The KRSG will continue to submit copies of analytical data to USEPA, if necessary, from TCRA sampling activities performed in June

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment TCRA
Monthly Report #27, May 2009

Table A — Summary of Data Received in May 2009

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result (mg/kg)	PCB Action Limit	Response Action
Post-Construction Soil Samples									
TS10006	04/29/09	05/18/09	TCRA119_SDSP	TAL	Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25753 (January 2008)	PCBs	0 27	0 33	None
[TS10007]						[PCBs]	[0 26]	[0 33]	[None]
TS10008					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25754 (January 2008)	PCBs	< 0 060	0 33	None
TS10009					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25755 (January 2008)	PCBs	< 0 059	0 33	None
TS10010					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25756 (January 2008)	PCBs	< 0 059	0 33	None
TS10011					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25757 (January 2008)	PCBs	< 0 056	0 33	None
TS10012					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25758 (January 2008)	PCBs	< 0 055	0 33	None
TS10013					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25759 (January 2008)	PCBs	< 0 053	0 33	None
TS10014					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25760 (January 2008)	PCBs	< 0 053	0 33	None
TS10015					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25761 (January 2008)	PCBs	< 0 053	0 33	None

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Former Plainwell Impoundment TCRA
Monthly Report #27, May 2009**

Table A — Summary of Data Received in May 2009

Sample ID	Sample Date	Data Received	Sample Delivery Group	Laboratory	Sample Location	Analysis Conducted	PCB Result (mg/kg)	PCB Action Limit ¹	Response Action
TS10016	04/29/09	05/18/09	TCRA119_SDSP	TAL	Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25762 (January 2008)	PCBs	< 0.059	0.33	None
TS10017					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25763 (January 2008)	PCBs	< 0.056	0.33	None
TS10018					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25764 (January 2008)	PCBs	< 0.054	0.33	None
TS10019					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25765 (January 2008)	PCBs	< 0.057	0.33	None
TS10020					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25766 (January 2008)	PCBs	< 0.058	0.33	None
TS10021					Post construction sample collected every 200' from access road between Miller Road and Staging Area 4N Same location as pre-construction sample K25767 (January 2008)	PCBs	< 0.056	0.33	None
TS10022					Post construction sample collected from Consumers Energy property near the Plainwell Dam Same location as pre-construction sample K25737 (September 2007)	PCBs	< 0.055	0.33	None
TS10023					Post construction sample collected from Consumers Energy property near the Plainwell Dam Same location as pre-construction sample K25738 (September 2007)	PCBs	< 0.054	0.33	None
TS10024					Post construction sample collected from Consumers Energy property near the Plainwell Dam Same location as pre-construction sample K25751 (October 2007)	PCBs	< 0.055	0.33	None
[TS10025]						[PCBs]	[< 0.054]	[0.33]	[None]

Notes:

* Duplicate samples are shown in brackets

* Analytical results have not been validated

1 - Sample concentration compared to pre-construction sample concentrations

mg/kg - milligrams per kilogram

NR - not received

PCB - Polychlorinated Biphenyls

TAL - TestAmerica Laboratories

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRI/FS – Area 1**

REPORT #27, MAY 2009

**Significant Developments and Activities during the Period, Including Actions Undertaken
Pursuant to the AOC and SOW**

- On May 6, USEPA approved the revised Phase 2 work plan for the Crown Vantage area and the revised Phase 2 work plan for the focused step-out sampling in Area 1. The Crown Vantage sampling is described in Section 3.4.3 of the Area 1 SRI/FS Work Plan. The focused step-out sampling is described in Section 3.4.4 of the Area 1 SRI/FS Work Plan.
- On May 6, Georgia-Pacific LLC (Georgia-Pacific), ARCADIS, and the Michigan Department of Natural Resources met at the Plainwell No. 2 Dam Area to tour the area.
- On May 7, ARCADIS, Georgia-Pacific, and USEPA held a conference call to discuss the Plainwell No. 2 Dam Area time-critical removal action (TCRA).
- On May 13, USEPA forwarded to Georgia-Pacific the revised draft AOC for the Plainwell No. 2 Dam Area TCRA.
- On May 14, the Michigan Department of Environmental Quality (MDEQ) forwarded to USEPA the long-term monitoring program report, titled *Summary of Baseline PCB Concentrations in Surface Water and Fish Tissue, Evaluation of Pre- and Post-TCRA Data from the Bryant Mill Pond, and Site-Wide Trends in Fish Tissue PCB Concentrations*.
- On May 18, USEPA forwarded to ARCADIS approval of the Conceptual Site Model (CSM) Report. The CSM is discussed in Section 1.2.1.4 of the SOW.
- On May 20, USEPA provided comments to ARCADIS on the Multi-Area FS Technical Memorandum - Preliminary Permitting/Equivalency Requirements, which is discussed in Section 1.2.2.3 of the SOW.
- On May 21, ARCADIS submitted to USEPA the final CSM Report.
- On May 21, ARCADIS, Georgia-Pacific and USEPA met in Chicago to discuss site-related issues.
- On May 22, ARCADIS submitted to USEPA the draft Design Report for the Plainwell No. 2 Dam Area TCRA.
- Georgia-Pacific awaits USEPA's response to the letter requesting USEPA's data usability determination for existing data for purposes of the SRI/FS, which was submitted to USEPA on August 27, 2007. These data are described in Section 1.1.2 of the SOW.

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRI/FS – Area 1**

REPORT #27, MAY 2009

- Georgia-Pacific awaits USEPA's comments on the one remaining Multi-Area FS document described in Section 1 2 2 of the SOW (Preliminary Remedial Technology Screening [Section 1 2 2 1]) and the Candidate Technologies and Testing Needs Technical Memorandum (described in Section 4 1 of the SOW), which were submitted to USEPA on February 22, 2008
- Georgia-Pacific awaits USEPA comments on the revised *Source Investigation at the Former Kalamazoo and Hawthorne Mill Properties* report, which is discussed in Section 2 2 1 1 of the SOW.

Data Collected and Field Activities Conducted during the Period

- On May 5, ARCADIS collected water level readings from the three staff gauges located in the Plainwell No. 2 Dam Area Table A summarizes the data collected
- During the week of May 11, Germano & Associates performed sediment profile imaging in Lake Allegan Lake Allegan is Area 6 of Operable Unit 5
- During the week of May 11, ARCADIS collected sediment cores for geochronologic analyses in Lake Allegan Table B presents the samples that were collected The samples were sent to Mass Spec Services for radionuclide analysis and to TestAmerica Laboratories, Inc (TestAmerica) for PCB analysis Samples for PCB analysis are being retained in frozen storage at TestAmerica pending results of the radionuclide analysis

Laboratory Data Received during the Period

- On May 13, ARCADIS received the analytical results from TestAmerica for the first round of groundwater and surface water samples collected in the Plainwell TCRA area (sample delivery group [SDG] KAL459) Table C presents the samples for which data were received. These samples were collected in accordance with Section 3 4 6 of the Area 1 SRI/FS Work Plan
- No data packages were received in March, therefore, no validated data packages are included in this monthly report

Problems

- No problems were encountered

Actions Taken to Correct Problems

- None

**Monthly Progress Report for the Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site SRI/FS – Area 1**

REPORT #27, MAY 2009

Developments Anticipated during the Next Two Reporting Periods

- During the week of June 22, ARCADIS is scheduled to collect the samples as outlined in the revised Phase 2 work plan for the Crown Vantage area, the samples as outlined in the revised Phase 2 work plan for the focused step-out sampling in Area 1, and additional bathymetric monitoring data in the former Plainwell Impoundment. Bathymetric monitoring in the former Plainwell Impoundment is discussed in Section 3.4.5 of the Area 1 SRI/FS Work Plan.
- During the week of June 29, ARCADIS is scheduled to collect the second round of groundwater and surface water samples in the Plainwell TCRA area.
- On June 12, ARCADIS, Georgia-Pacific, and USEPA are scheduled to meet to discuss the Plainwell No. 2 Dam Area TCRA Draft Design Report.
- In June, ARCADIS is scheduled to send out access request letters to landowners associated with the Plainwell No. 2 Dam Area TCRA.
- In June, ARCADIS is scheduled to submit a revised draft Multi-Area FS Technical Memorandum - Preliminary Permitting/Equivalency Requirements to USEPA.
- In June, USEPA is scheduled to provide comments on the revised *Source Investigation at the Former Kalamazoo and Hawthorne Mill Properties* report.
- Validated data for the SDGs received in April from TestAmerica will be included in the June monthly report. These data include post-removal sediment sampling completed in March in the Plainwell TCRA area (SDGs TCRA116 through TCRA118). This activity is described in Section 3.4.5 of the Area 1 SRI/FS Work Plan.

Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #27, May 2009

Table A — Staff Gage Data — Plainwell No. 2 Dam Area — May 2009

Date	SG-1			SG-2			SG-3		
	Time	Elevation (feet)	Measured Flow (cfs)	Time	Elevation (feet)	Measured Flow (cfs)	Time	Elevation (feet)	Measured Flow (cfs)
5/5/2009	—	722.6	458	15:40	723.3	939	14:26	726.2	2404

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #27, May 2009**

Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/13/2009	ALG-9A	1 5	2 7	2 6	0-1	K16793	Black silty fine sand	Frozen at Kalamazoo Field Office
					1-2	K16794	Black silty fine sand	Frozen at Kalamazoo Field Office
					2-3	K16795	Black silty fine sand	Frozen at Kalamazoo Field Office
					3-4	K16796	Black silty fine sand	Frozen at Kalamazoo Field Office
					4-5	K16797	Black silty fine sand	Frozen at Kalamazoo Field Office
					5-6	K16798	Black silty fine sand	Frozen at Kalamazoo Field Office
					6-7	K16799	Black silt with fine sand	Frozen at Kalamazoo Field Office
					7-8	K16800	Black silt with fine sand	Frozen at Kalamazoo Field Office
					8-9	K16801	Dark gray to black silt	Frozen at Kalamazoo Field Office
					9-10	K16802	Dark gray to black silt	Frozen at Kalamazoo Field Office
					10-12	K16803	Dark gray to black silt	Frozen at Kalamazoo Field Office
					12-14	K16804	Dark gray to black silt	Frozen at Kalamazoo Field Office
					14-16	K16805	Dark gray to black silt	Frozen at Kalamazoo Field Office
					16-18	K16806	Dark gray to black silt	Frozen at Kalamazoo Field Office
					18-20	K16807	Dark gray to black silt	Frozen at Kalamazoo Field Office
					20-25	K16808	Dark gray to black silt	Frozen at Kalamazoo Field Office
					25-30	K16809	Dark gray to black silt	Frozen at Kalamazoo Field Office
					30-35	K16810	Dark gray to black silt	Frozen at Kalamazoo Field Office
					35-40	K16811	Dark gray to black silt	Frozen at Kalamazoo Field Office
					40-45	K16812	Dark gray to black silt	Frozen at Kalamazoo Field Office
					45-50	K16813	Dark gray to black silt	Frozen at Kalamazoo Field Office
					50-55	K16814	Black silty clay, trace organics	Frozen at Kalamazoo Field Office
					55-60	K16815	Black silty clay, trace organics	Frozen at Kalamazoo Field Office
					60-65	K16816	Black silty clay, trace organics	Frozen at Kalamazoo Field Office
					65-70	K16817	Black silty clay, trace organics	Frozen at Kalamazoo Field Office
5/13/2009	ALG-10	2 0	4 0	3 8	0-1	K16845	Black silty fine sand	
					1-2	K16846	Black silty fine sand	
					2-3	K16847	Black silty fine sand	
					3-4	K16848	Black silty fine sand	
					4-5	K16849	Black silty fine sand	
					5-6	K16850	Black silty fine sand	

See Notes on Page 9

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #27, May 2009**

Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/13/2009	ALG-10 (Cont)	2 0	4 0	3 8	6-7	K16851	Black silty fine sand	
					7-8	K16852	Black silty fine sand	
					8-9	K16853	Dark gray to black silt, trace organics	
					9-10	K16854	Dark gray to black silt, trace organics	
					10-12	K16855	Dark gray to black silt, trace organics	
					12-14	K16856	Dark gray to black silt, trace organics	
					14-16	K16857	Dark gray to black silt, trace organics	
					16-18	K16858	Dark gray to black silt, trace organics	
					18-20	K16859	Dark gray to black silt, trace organics	
					20-25	K16860	Black silt to dark gray, trace organics	
					25-30	K16861	Black silt to dark gray, trace organics	
					30-35	K16862 ¹	Dark gray silt	
					35-40	K16863	Dark gray silt	
					34-40	K16864	Dark gray silt	DUP-01 (PCB Analysis Only)
					40-45	K16865	Dark gray silt	
					45-50	K16866	Dark gray silt	
					50-55	K16867	Dark gray silt	
					55-60	K16868	Dark gray silt	
					55-60	K16869	Dark gray silt	DUP-02 (PCB Analysis Only)
					60-65	K16870	Dark gray silt	
					65-70	K16871 ¹	Dark gray silt	
					70-75	K16872	Dark gray silt	Frozen at Kalamazoo Field Office
					75-80	K16873	Dark gray silt	Frozen at Kalamazoo Field Office
					80-85	K16874	Dark gray silt	Frozen at Kalamazoo Field Office
					85-90	K16875	Dark gray silt	Frozen at Kalamazoo Field Office
					90-95	K16876	Dark gray silt	Frozen at Kalamazoo Field Office
					95-100	K16877	Dark gray silt	Frozen at Kalamazoo Field Office

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**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #27, May 2009**

Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/13/2009	SPI-40	2 3	3 3	3 2	0-1	K16818	Black silty fine sand	Frozen at Kalamazoo Field Office
					1-2	K16819	Black silty fine sand	Frozen at Kalamazoo Field Office
					2-3	K16820	Black silty fine sand	Frozen at Kalamazoo Field Office
					3-4	K16821	Black silty fine sand	Frozen at Kalamazoo Field Office
					4-5	K16822	Black silty fine sand	Frozen at Kalamazoo Field Office
					5-6	K16823	Black silty fine sand	Frozen at Kalamazoo Field Office
					6-7	K16824	Black silty fine sand	Frozen at Kalamazoo Field Office
					7-8	K16825	Black silty fine sand	Frozen at Kalamazoo Field Office
					8-9	K16826	Black silty fine sand	Frozen at Kalamazoo Field Office
					9-10	K16827	Black silt, trace fine sand	Frozen at Kalamazoo Field Office
					10-12	K16828	Black silt, trace fine sand	Frozen at Kalamazoo Field Office
					12-14	K16829	Black silt, trace fine sand	Frozen at Kalamazoo Field Office
					14-16	K16830	Black silt, trace fine sand	Frozen at Kalamazoo Field Office
					16-18	K16831	Dark gray to black silt, trace fine sand, trace organics	Frozen at Kalamazoo Field Office
					18-20	K16832	Dark gray to black silt, trace fine sand, trace organics	Frozen at Kalamazoo Field Office
					20-25	K16833	Black silt to dark gray trace organics	Frozen at Kalamazoo Field Office
					25-30	K16834	Black silt to dark gray trace organics	Frozen at Kalamazoo Field Office
					30-35	K16835	Black silt to dark gray trace organics	Frozen at Kalamazoo Field Office
					35-40	K16836	Black silt	Frozen at Kalamazoo Field Office
					40-45	K16837	Black silt	Frozen at Kalamazoo Field Office
					45-50	K16838	Black silt	Frozen at Kalamazoo Field Office
					50-55	K16839	Black silt	Frozen at Kalamazoo Field Office
					55-60	K16840	Black silt	Frozen at Kalamazoo Field Office
					60-65	K16841	Black silt	Frozen at Kalamazoo Field Office
					65-70	K16842	Dark gray to black silt, organics	Frozen at Kalamazoo Field Office
					70-75	K16843	Dark gray to black silt, organics	Frozen at Kalamazoo Field Office
					75-80	K16844	Dark gray to black silt, organics	Frozen at Kalamazoo Field Office
					80-90		Woody Debris	No Sample

See Notes on Page 9

**Kalamazoo River Study Group
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Supplemental Remedial Investigations/Feasibility Studies
Monthly Report #27, May 2009**

Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/14/2009	ALG-5	13.5	3.0	2.8	0-1	K16965	Dark gray to black silt	
					1-2	K16966	Dark gray to black silt	
					2-3	K16967	Dark gray to black silt	
					3-4	K16968	Dark gray to black silt	
					3-4	K16969	Dark gray to black silt	DUP-08 (PCB Analysis Only)
					4-5	K16970	Dark gray to black silt	
					5-6	K16971	Dark gray to black silt	
					6-7	K16972	Dark gray to black silt	
					7-8	K16973	Dark gray to black silt	
					8-9	K16974	Dark gray to black silt	
					9-10	K16975	Dark gray to black silt	
					10-12	K16976 ¹	Dark gray to black silt	
					12-14	K16977	Dark gray to black silt	
					14-16	K16978	Dark gray to black silt	
					16-18	K16979	Dark gray to black silt	
					16-18	K16980	Dark gray to black silt	DUP-09 (PCB Analysis Only)
					18-20	K16981 ¹	Dark gray to black silt, trace organics	
					20-25	K16982	Dark gray to black silt, trace organics	
					25-30	K16983	Dark gray to black silt, trace organics	
					30-35	K16984	Dark gray to black clayey silt, trace organics	
					35-40	K16985 ¹	Dark gray to black clayey silt, trace organics	
					40-45	K16986	Dark gray to black clayey silt, trace organics	
					45-50	K16987	Dark gray to black clayey silt, trace organics	
					50-55	K16988	Dark gray to black clayey silt, trace organics	
					55-60		Woody Debris	No Sample
					60-65	K16989	Woody organics with silt	

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Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/14/2009	ALG-6	13.0	2.6	2.6	0-1	K16990	Dark gray to black silt	
					1-2	K16991	Dark gray to black silt	
					2-3	K16992	Dark gray to black silt	
					3-4	K16993	Dark gray to black silt	
					4-5	K16994	Dark gray to black silt	
					4-5	K16995	Dark gray to black silt	DUP-10 (PCB Analysis Only)
					5-6	K16996	Dark gray to black silt	
					6-7	K16997	Dark gray to black silt	
					7-8	K16998	Dark gray to black silt	
					8-9	K16999	Dark gray to black silt	
					9-10	K17000	Dark gray to black silt	
					9-10	K17001	Dark gray to black silt	DUP-11 (PCB Analysis Only)
					10-12	K17002	Dark gray to black silt	
					12-14	K17003 ¹	Dark gray to black silt	
					14-16	K17004	Dark gray to black silt	
					16-18	K17005	Dark gray to black silt	
					18-20	K17006 ¹	Dark gray to black silt	
					20-25	K17007	Dark gray to black silt	
					25-30	K17008	Dark gray to black silt	
					30-35	K17009	Dark gray to black silt	
					35-40	K17010 ¹	Dark gray to black silt	
					40-45	K17011	Dark gray to black silt	
					45-50	K17012	Dark gray to black silt	
					50-55	K17013	Dark gray to black silt	
					55-60	K17014	Dark gray to black clayey silt	
					60-65	K17015	Dark gray to black clayey silt	
5/14/2009	ALG-7	12.5	3.1	3.1	0-1	K16878	Dark gray to black very loose silt	
					1-2	K16879	Dark gray to black very loose silt	
					2-3	K16880	Dark gray to black very loose silt	
					2-3	K16881	Dark gray to black very loose silt	DUP-03 (PCB Analysis Only)
					3-4	K16882	Dark gray to black silt	

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Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/14/2009	ALG-7 (Cont)	12.5	3.1	3.1	4-5	K16883	Dark gray to black silt	
					5-6	K16884	Dark gray to black silt	
					6-7	K16885	Dark gray to black silt	
					7-8	K16886	Dark gray to black silt	
					8-9	K16887	Dark gray to black silt	
					9-10	K16888	Dark gray to black silt	
					10-12	K16889 ¹	Dark gray to black silt	
					12-14	K16890	Dark gray to black silt	
					14-16	K16891	Dark gray to black silt	
					14-16	K16892	Dark gray to black silt	DUP-04 (PCB Analysis Only)
					16-18	K16893	Dark gray to black silt	
					18-20	K16894	Dark gray to black silt	
					20-25	K16895 ¹	Dark gray to black silt	
					25-30	K16896	Dark gray to black silt	
					30-35	K16897	Dark gray to black silt	
					35-40	K16898	Dark gray to black silt	
					40-45	K16899	Dark gray to black silt	
					45-50	K16900	Dark gray to black silt	
					50-55	K16901	Dark gray to black silt	
					55-60	K16902	Dark gray to black silt	
					60-65	K16903	Dark gray to black silt, trace organics	
					65-70	K16904	Dark gray to black silt, trace organics	
					70-75	K16905	Dark gray to black clayey silt, trace organics	Frozen at Kalamazoo Field Office
					75-80	K16906	Dark gray to black clayey silt, trace organics	Frozen at Kalamazoo Field Office
					80-85	K16907	Dark gray to black clayey silt, trace organics	Frozen at Kalamazoo Field Office

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Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/14/2009	ALG-8	6.5	2.6	2.4	0-1	K16908	Dark gray to black silt	
					1-2	K16909	Dark gray to black silt	
					2-3	K16910	Dark gray to black silt	
					3-4	K16911	Dark gray to black silt	
					4-5	K16912	Dark gray to black silt	
					5-6	K16913	Dark gray to black silt	
					5-6	K16914	Dark gray to black silt	DUP-05 (PCB Analysis Only)
					6-7	K16915	Dark gray to black silt	
					7-8	K16916	Dark gray to black silt	
					8-9	K16917	Dark gray to black silt	
					9-10	K16918	Dark gray to black silt	
					10-12	K16919	Dark gray to black silt	
					12-14	K16920	Dark gray to black silt	
					12-14	K16921	Dark gray to black silt	DUP-06 (PCB Analysis Only)
					14-16	K16922	Dark gray to black silt	
					16-18	K16923 ¹	Dark gray to black silt	
					18-20	K16924	Dark gray to black silt	
					20-25	K16925	Dark gray to black silt	
					25-30	K16926	Dark gray to black silt	
					30-35	K16927	Dark gray to black silt	
					35-40	K16928	Dark gray to black silt	
					40-45	K16929	Dark gray to black silt	
					45-50	K16930	Dark gray to black silt	
					50-55	K16931	Dark gray to black silt	
					55-56	K16932	Dark gray silt, trace roots and shells	
5/14/2009	ALG-9	3.5	4.0	3.9	0-1	K16933	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office
					1-2	K16934	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office
					2-3	K16935	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office

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Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/14/2009	ALG-9 (Cont)	3 5	4 0	3 9	3-4	K16936	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office
					4-5	K16937	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office
					5-6	K16938	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office
					6-7	K16939 ¹	Dark gray to black silty fine sand, trace organics	Frozen at Kalamazoo Field Office
					7-8	K16940	Dark gray to black silt, trace fine sand	Frozen at Kalamazoo Field Office
					8-9	K16941	Dark gray to black silt, trace fine sand	Frozen at Kalamazoo Field Office
					9-10	K16942	Dark gray to black silt, trace fine sand	Frozen at Kalamazoo Field Office
					10-12	K16943	Dark gray to black silt, trace fine sand	Frozen at Kalamazoo Field Office
					10-12	K16944 ¹	Dark gray to black silt, trace fine sand	DUP-07 (PCB Analysis Only), Frozen at Kalamazoo Field Office
					12-14	K16945 ¹	Dark gray to black silt, trace fine sand	Frozen at Kalamazoo Field Office
					14-16	K16946	Dark gray to black silt, trace fine sand, trace organics	Frozen at Kalamazoo Field Office
					16-18	K16947	Dark gray to black silt, trace fine sand, trace organics	Frozen at Kalamazoo Field Office
					18-20	K16948	Dark gray to black silt, trace fine sand, trace organics	Frozen at Kalamazoo Field Office
					20-25	K16949	Dark gray to black silt, trace fine sand, trace organics	Frozen at Kalamazoo Field Office
					25-30	K16950	Dark gray to black silt	Frozen at Kalamazoo Field Office
					30-35	K16951	Dark gray to black silt	Frozen at Kalamazoo Field Office
					35-40	K16952	Dark gray to black silt	Frozen at Kalamazoo Field Office

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Table B — Lake Allegan (Area 6) — Sediment Cores Collected in May 2009

Date Collected	Location	Water Depth (ft)	Penetration (ft)	Recovery (ft)	Interval (cm)	Sample ID	Description	Comments
5/14/2009	ALG-9 (Cont)	3.5	4.0	3.9	40-45	K16953	Dark gray to black silt	Frozen at Kalamazoo Field Office
					45-50	K16954	Dark gray to black silt	Frozen at Kalamazoo Field Office
					50-55	K16955	Dark gray to black silt	Frozen at Kalamazoo Field Office
					55-60	K16956	Dark gray to black silt	Frozen at Kalamazoo Field Office
					60-65	K16957	Dark gray to black silt	Frozen at Kalamazoo Field Office
					65-70	K16958	Dark gray to black silt	Frozen at Kalamazoo Field Office
					70-75	K16959	Dark gray to black silt	Frozen at Kalamazoo Field Office
					75-80	K16960	Dark gray to black silt	Frozen at Kalamazoo Field Office
					80-85	K16961	Dark gray to black silt	Frozen at Kalamazoo Field Office
					85-90	K16962	Dark gray to black silt	Frozen at Kalamazoo Field Office
					90-95	K16963	Dark gray to black silt	Frozen at Kalamazoo Field Office
					95-100	K16964	Dark gray to black silt	Frozen at Kalamazoo Field Office

Notes:

All samples (not listed as frozen at the Kalamazoo Field Office) were submitted to Mass Spec for Pb-210 and Cs-137 geochronological analysis and TestAmerica for PCB analysis (on hold at lab)

¹MS/MSD performed on this sample

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**Table C — Plainwell TCRA Area — Groundwater and Surface Water Samples - Data Received in
May 2009**

Date Sampled	Sample ID	Location ID	SDG
4/13/2009	TS40000	MW-12	KAL459
	TS40001	MW-14	KAL459
	TS31000	SG-5	KAL459
4/14/2009	TS40002 [TS40003]	MW-11	KAL459
	TS40004	MW-13	KAL459
	TS40005	MW-10	KAL459
	TS40006	MW-15	KAL459
4/15/2009	TS40007	MW-4	KAL459
	TS40008	MW-5	KAL459
	TS40009	MW-8	KAL459
	TS40010	MW-3	KAL459
	TS40011	MW-7	KAL459
4/16/2009	TS40012	MW-2	KAL459
	TS40013 ¹	MW-6	KAL459
	TS40014 [TS40015]	MW-1	KAL459
4/17/2009	TS40016	MW-9	KAL459
	TS31001 ¹ [TS31002]	SG-5	KAL459

Notes:

All samples sent to TestAmerica Laboratories, Inc. for the following analyses
PCBs, total organic carbon (TOC), total dissolved solids (TDS), total
suspended solids (TSS), chloride, sulfate and alkalinity, and total metals
(i.e., sodium, calcium, potassium, magnesium)

¹MS/MSD performed on this sample

Duplicate samples are in brackets